KNOCK-DOWN ICE CHEST STAND/CART

This invention relates to stands and carts that may be readily assembled for use and then readily disassembled for transport / storage, and more particularly for such devices for holding ice chests / coolers together with items for use therewith.

BACKGROUND OF THE INVENTION

Sturdy worktables with prefabricated knock down frames are disclosed by U.S. patent #4,630,550 issued Dec. 23, 1986 to Weitzman. He employs square section tubing that telescope into special square section tubing connectors to hold heavy equipment. U.S. patent #6,550,791 issued 4/22/2003 to Ramsey discloses a cart for holding a cooler and fishing accessories that is not knock-down. U.S. patent #6,651,456 issued 11/25/2003 to applicants discloses a rolling cart with an ice chest. Since coolers with accessories are often employed at public gathering events in diverse locales, and may not be used in between events, it would be useful to have carts and stands that will be readily disassembled and reassembled without tools for transport and storage.

SUMMARY OF THE INVENTION

It is accordingly an object of the invention to provide stationary stands, with or without wheels, especially constructed for use with coolers that can be assembled and disassembled without tools. It is another object that the disassembled device be compact for storage and transport. It is yet another object that the assembled device be provided with means to hold items that are used in conjunction with the cooler. The terms ice chest and cooler are used interchangeably to apply to insulated containers commonly employed to hold ice. These and other objects, features, and advantages of the invention will become more apparent when the detailed description is studied in conjunction with the drawings in which like elements are designated by like reference characters in the various drawing figures.

BRIEF DESCRIPTION OF THE DRAWINGS

- Fig. 1 is a front elevation view of the assembled stand in wheeled configuration.
- Fig. 2 is an exploded view of the disassembled stand.
- Fig. 3 is a side elevation view of the stand.
- Fig. 4 is a perspective view of a bottle holder that mounts on a front member.
- Fig. 5 is a sectional view through line 5-5 of Fig.1.
- Fig. 6 is a sectional view through line 6-6 of Fig. 1.

Fig. 7 is a perspective view of a bottle holder that mounts on a side member.

Fig. 8 is a perspective view of the assembled stand.

DETAILED DESCRIPTION OF PREFERRED EMBODIMENTS

Referring now to the drawing Figures, the stand 1 of the invention has first and second side members 2, front member 3, and rear member 4. These members are formed of bent rectangular cross section tubing. Through holes 12, 13, 14 are disposed so that they align when assembled to receive fasteners 15 with wing nuts 16. These thereby draw flat faces 17 together to a tightly juxtaposed position for enhanced rigidity of the assembled structure. The forward bends 7 in the lower portion of forward legs 5 of the side members corresponds to the forward bends 8 in the lower portion of the legs of front member 3. Alternatively, it may be the rear member and rear legs of side members that may be bent outward. These extend the footprint of the stand to prevent it from tipping. Elongate first panels 20 are affixed to the undersides 21 of horizontal elements 10 and 11. They extend inward beyond elements 10 and 11 sufficiently to support the front and rear edges 35 of cooler 34. A transverse reinforcement strut 36 may optionally be provided on side members 2.

Wheel assemblies 18 may be inserted in the bottom end of certain of the legs 19 to make the stand into a rolling stand or cart. Alternatively mar-resistant cushioned elements 33 may be installed to protect a support surface when a non-rolling stand is desired.

A first bottle holder 22 may be provided. It comprises a rigid lower panel 23 and a rigid upper panel 24 held in spaced apart relation by vertical spacers 28. Apertures 26 in panel 24 are dimensioned to pass bottles 27 therethrough so that they will rest securely on the lower panel 23. An elongate rigid right angle element 29 has a first leg 30 affixed to the underside 31 of upper panel 24. A second leg 32 depends below panel 24, such that it will fit over the horizontal element 10 of the front member and rest upon the first panel 20. The panels 23,24 are long enough so that they rest securely against the legs of the front member when the second leg 32 of right angle element 29 is resting on the first panel 20.

A second bottle holder 37 may also be provided. It is supported on a side member 2 for holding additional bottles that may be of a different size than those held in the first bottle holder. A rigid upper panel 39 and lower panel 38 are affixed in spaced-apart relationship by vertical spacers 41, so that a bottle 27' will pass through apertures 40 in panel 39 and be held in place by

lower panel 38. The panels 38,39 have a length 46 great enough to extend beyond the legs 5,6 of the side member. An elongate rigid element 42 is fixed to an inner edge 43 of the upper panel and extends downward therefrom so as to engage the inner aspect 44 of legs 5,6 while the outer aspect 45 of the legs is engaged by the upper panel and the lower panel when the lower panel rests upon the transverse member 36.

While we have shown and described the preferred embodiments of our invention, it will be understood that the invention may be embodied otherwise than as herein specifically illustrated or described, and that certain changes in form and arrangement of parts and the specific manner of practicing the invention may be made within the underlying idea or principles of the invention.